

In the Claims

Please **cancel claims 1-14** without prejudice.

Please **add claims 15-31** as follows:

15. (New) A method of producing lime water comprising:
- deionising dilution water by membrane filtration, distillation or an ion exchange resin;
 - adding silicate ions to the deionised water; and
 - mixing milk of lime with the ^{deionised} water to form lime water.
16. (New) The method of claim 15 wherein said silicate ^{ions} are selected from the group consisting of sodium silicate and potassium silicate.
17. (New) The method of claim 16 wherein the silicate ions are sodium silicate.
18. (New) The method of claim 15 wherein the dilution water is deionised by membrane filtration and wherein the ^{deionised} water ~~has been~~ subjected to a nano-filtration or a filtration by reverse osmosis.
19. (New) The method of claim 15 wherein the milk of lime and dilution water are mixed in a saturator and wherein the silicate ions are introduced into the saturator.
20. (New) The method of claim 15 wherein the silicate ions are added to the deionised dilution water such that the resulting mixture has a concentration of 5 mg/l to 40 mg/l of silicate ions.

21. (New) The method of claim 15 wherein the method is carried out in a system utilizing a saturator having a series of inlet lines and a silicate ion inlet line for directing silicate ions into the dilution water.
22. (New) The method and system of claim 21 including a mixer for mixing the silicate ions with the dilution water.
23. (New) The method and system of claim 22 wherein the mixer is a static mixer.
24. (New) The method and system of claim 21 including means for measuring the quality of lime water produced in the saturator and means to vary the silicate ion dosage.
25. (New) The method and system of claim 21 including a device for measuring the lime water quality where the device is taken from the group consisting of a turbidimeter, a pH meter, and a conductivity meter.
26. (New) The method of claim 15 including combining carbon dioxide and the lime water and using the combined carbon dioxide and lime water to remineralize water.
27. (New) The method of claim 15 wherein the addition of the silicate ions causes solids in the lime water to precipitate.
28. (New) The method of claim 27 wherein the addition of the silicate ions causes precipitation of CaH_2SiO_4 .
29. (New) A system for producing lime water comprising: a saturator; an inlet for directing milk of lime into the saturator; an inlet for directing deionised dilution water into the saturator; a

sludge outlet associated with the saturator; a deioniser for deionising the dilution water prior to the water being directed into the saturator; and a silicate ion inlet associated with the saturator for directing silicate ions into the saturator.

30. (New) The system of claim 29 wherein the deioniser comprises a nano-filter.

31. (New) The system of claim 29 wherein the deioniser comprises a membrane filter.